



X-Plain™
Sexually Transmitted Diseases
Reference Summary

Sexually transmitted diseases, or STDs, are some of the most common infectious diseases in the United States.

There are more than 20 STDs, the most deadly being the HIV virus. Other sexually transmitted diseases include syphilis, gonorrhea, and chlamydia.

This reference summary reviews some common STDs and how they can be diagnosed, treated, and prevented.



Causes of STDs

An infectious disease is a disease that can be passed from one person to another. Sexually transmitted diseases are a category of diseases that are spread via sexual activities, such as vaginal intercourse, oral sex, or anal sex.

Sexually transmitted diseases are caused by one of 3 types of organisms.

Parasites. Parasites are very small animals that get nourishment from the person they infect. The infected person is called the host. Pubic lice, also called crabs, are an example of sexually transmitted parasites.

Bacteria. Bacteria are organisms made of one cell. They cling together to feed from the body of their host. Gonorrhea, syphilis, chlamydia, and chancroid are examples of sexually transmitted bacteria.

Viruses. Viruses are complex molecules that can multiply when they invade the cells of their host. HIV, herpes, and hepatitis are examples of sexually transmitted viruses.

Usually infections that are caused by a virus cannot be cured, but in some cases they can be controlled.

Parasitic infections can be treated with medications or over-the-counter drugs.

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Bacterial infections can be treated with antibiotics.

Common Viral STDs

Three of the most common STDs that are caused by viruses are AIDS, genital herpes, and genital warts. This section discusses each of them in greater detail.

AIDS is a sexually transmitted disease that is caused by the HIV virus. The HIV virus destroys the body's ability to fight off infection.

The HIV virus spreads primarily during sexual activity. It also spreads through shared needles used by intravenous drug users.

People who have AIDS have a weak immune system and their body cannot fight off disease very well. Early signs include extreme tiredness and fever.

During later stages of AIDS, pneumonia or cancer may develop, which can ultimately lead to death.

There is no cure for AIDS, but there are medications that can sometimes keep it somewhat under control and slow its progress.

Genital herpes affects about 60 million people in the United States. Herpes simplex virus, or HSV, causes herpes infections.

The main sign of herpes is painful blisters or open sores in the genital area. Before these show up, the person may feel a tingling or burning sensation in the genital region, legs, or buttocks.



In women, herpes sores could be hidden inside the vagina. Some women may not even know that they are infected!

Herpes sores usually disappear within 2 to 3 weeks, but the virus remains in the body forever and the lesions may come back from time to time.

If genital herpes lesions are severe or if they frequently recur, they can be treated with prescription medications. These drugs help control the symptoms but do not eliminate the herpes virus from the body.

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Human papillomavirus, or HPV, causes genital warts. This virus is related to the virus that causes common skin warts.

At first, genital warts are usually small, hard, painless bumps in the vaginal area, on the penis, or around the anus. If untreated, the warts may grow and develop a fleshy, cauliflower-like appearance.

In addition to causing genital warts, certain HPV viruses can cause cancer of the cervix and other genital cancers.

Genital warts are treated with a topical drug that is applied right on the skin. They can also be treated with cryosurgery, which is freezing with a very cold probe.

If warts come back, interferon injections may be given. Interferon is a medication that may help kill the warts by boosting the patient's immune system and by interfering with the replication of the virus inside the human cells.

Large warts can be removed with surgery.

Common Bacterial STDs

Three of the most common STDs that are caused by bacteria are chlamydia, gonorrhea, and syphilis. This section discusses each of them in greater detail.

Chlamydia is caused by bacteria. It is the most common bacterial STD.

In both men and women, chlamydial infection can cause an abnormal genital discharge and burning during urination. If chlamydia goes untreated in women, it may lead to pelvic inflammatory disease, which can cause a woman to become infertile or to have ectopic pregnancies.

An ectopic pregnancy is when the fetus attaches itself to the inside of the Fallopian tube instead of the uterus. Since the Fallopian tube does not have room for a full-grown fetus, the tube becomes swollen. This causes severe pain and the tube could actually rip apart.

Sometimes ectopic pregnancies have to be terminated surgically, which scars the Fallopian tubes and decreases the chances of the woman becoming pregnant again. A procedure like this also increases the chance of more ectopic pregnancies.

It is common for people with chlamydia to have few or no symptoms of infection. Chlamydia can be treated with antibiotics.

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Bacteria also cause gonorrhea. The most common symptoms of gonorrhea are:

- Discharge from the vagina or penis
- Painful or difficult urination.

The most common and serious complications of gonorrhea occur in women. They include pelvic inflammatory disease, increased risk of ectopic pregnancies, and infertility.



Penicillin and new powerful antibiotics can be used to treat gonorrhea.

Syphilis, like gonorrhea and chlamydia, is also caused by bacteria.

Syphilis may go undetected at first because symptoms usually start out very mild and can disappear suddenly. The earliest symptom is a painless, open sore that may appear:

- On the penis
- Around or in the vagina
- Near the mouth
- Near the anus, or
- On the hands.

If untreated, syphilis may advance to more serious stages. A temporary rash develops at first, but eventually the heart and central nervous system may become infected. The full course of the disease can take years.

Penicillin is the most effective drug used to treat syphilis.

Parasitic STDs

The most common STD that is caused by parasites is called pubic lice, or crabs.

Pubic lice infect pubic hair and live by sucking blood. They are spread through sexual activity but can be passed from clothing or objects, such as toilet seats and bed blankets.

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Pubic lice cause the infected person to itch as the lice suck blood. The lice do not produce a rash, but itching the skin constantly could cause irritation as the skin becomes raw. In addition, some people have an inflammatory skin reaction to the lice's bite.

The lice can be seen by the naked eye upon close inspection. With a magnifying lens, the eggs can be seen; they are usually attached to the base of pubic hairs.

Pubic lice can be treated and destroyed with one application of a prescription medication or with over-the-counter shampoo.

In pregnant women, STDs can cause:

- Spontaneous abortion.
- Low birth weight.
- Premature birth.
- Permanent neurological damage to the newborn.
- Transmission of the infection to the baby



Symptoms & Diagnosis

If you are at risk of being infected with STDs, you should have regular checkups for STDs, even if you do NOT notice symptoms. These tests can be done during a routine visit to your doctor's office. This is particularly important when you begin a new sexual relationship.

You should also learn to recognize common symptoms of STDs. Seek medical help immediately if any suspicious symptoms develop, even if they are mild. These symptoms may include:

- Burning in genital area
- Itching in genital area
- Discharge from the urethra or the vagina
- Sores in genital, anal or oral areas

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- Warts in genital or anal areas
- Lumps in genital or anal areas
- Foul smell from genital area
- Painful bowel movements.

Since many STDs do not have symptoms that are easy to recognize, sexually active people should have regular medical check ups.

Many symptoms, like sores, rashes, and discharges, come and go. If the symptoms disappear, it does not mean that the person is cured. Many viruses sleep and re-attack from time to time.

A medical check-up consists of a detailed sexual history, as well as a detailed medical examination.

The exam includes a thorough check of the genital area, oral cavity, and rectum. Many STDs can involve the mouth or rectum, especially when oral and anal sex are practiced.

Swabs from open sores or discharges may be taken and tested for various microorganisms.

Women will have a pelvic examination. Swabs from inside the vagina and the cervix may be taken to check for infections. The swab from the cervix is also known as a Pap smear.

Urine test and blood tests may also be done to check for diseases such as AIDS and syphilis.

If your doctor tells you that you have an STD, you need to let your sexual partner know. This will give them the opportunity to get tested and treated.

If you do not tell your sexual partner, they will be at risk of serious sickness and you will risk being re-infected.

Open communication about STDs is a difficult part of a sexual relationship. However, it is needed to help stop the transmission of these diseases.

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Treatment & Prevention

The treatment recommended by the doctor depends on the diagnosed STD. Infections caused by bacteria and parasites are usually treated with antibiotics. Syphilis, gonorrhea, chlamydia, chancroid, and trichomonas are treated this way.

STDs caused by viruses usually cannot be cured. Medical treatment aims at keeping them under control, but even that may not be very successful. These diseases include HIV, herpes, hepatitis and human papillomavirus.



If you never take part in any kind of sexual activity, there is essentially no risk of getting an STD. However, AIDS and other STDs can be transmitted by sharing IV needles.

If you have only one sexual partner who has had no other sexual partners, there is virtually no risk of getting infected with STDs, as long as you do not engage in non-protected anal sex.

If you or your sexual partner has sex with many people, you are at risk of being infected with STDs. Your risk of getting an STD is higher when:

- There are more sexual partners involved.
- Illegal drug habits are involved.
- You know very little about your partner's sexual history.

The following are 7 tips that can help prevent STDs:

- Correctly and consistently use a male condom. Condoms are not a 100% guarantee, but they greatly reduce the risk of getting STDs.
- Use spermicidal foam or lubricant.
- Wash your genital area with soap and water after sex. This may flush away parasites, such as pubic lice and other germs.
- Urinate after sex. This could wash away some germs that have entered the urinary catheter.

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- Avoid having sex during menstruation. Women who have HIV are more infectious and women who do not have HIV are more susceptible to STDs during this time.
- Avoid douching because it removes most of the normal protective bacteria in the vagina and increases the risk of getting STDs.
- Avoid anal intercourse. If it is preferred, use a male condom. The rectum and anus bear a great deal of germs; these germs can cause STDs in both men and women. The mouth, female genitalia, or male genitalia should NOT be exposed to any object or body part that has been in contact with the anus or rectum.

Summary

STDs are some of the most common infectious diseases. Not only can they cause sores and foul smelling discharge, they can lead to serious complications, such as liver failure, cancers, neurological problems and death!

Preventing STDs is possible by following simple sexual hygiene. The higher the number of sexual partners you have and the less you know about their sexual and drug habits, the higher your risk of getting an STD is.

Thanks to advances in medicine, most STDs caused by bacteria and parasites can be cured and their complications limited if treated EARLY.

STDs caused by viruses can sometimes be controlled. However, to benefit from treatment, people who have sex with more than one partner should learn to recognize the symptoms and have regular medical checkups.

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